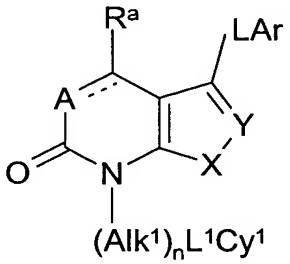
This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A compound of formula (1):



(1)

wherein

the dashed line joining A and C(R^a) is present and represents a bond and A is a -N= atom or a -C(R^b)= group, or the dashed line is absent and A is a -N(R^b)- or -C(R^b)(R^c)- group;

R^a, R^b and R^c ~~is~~ are each independently a hydrogen atom or an optionally substituted C_{1-6} alkyl, -CN, -CO_2H, -CO_2R^1 ~~(where R^1 is an optionally substituted alkyl group)~~, -$CONH_2$, -$CONHR^1$ or -$CONR^1R^2$ group ~~(where R^2 is an optionally substituted alkyl group)~~;

R^1 and R^2 are each, independently, an optionally substituted alkyl group;

X is an -O-, -S- or substituted nitrogen atom or a -S(O)-, -$S(O)_2$- or -NH- group;

Y is a nitrogen or substituted carbon atom or a -CH= group;

n is zero or the integer 1;

Alk^1 is an optionally substituted aliphatic or heteroaliphatic chain;

L^1 is a covalent bond or a linker atom or group;

Cy^1 is a hydrogen atom or an optionally substituted cycloaliphatic, polycycloaliphatic, heterocycloaliphatic, polyheterocycloaliphatic, aromatic or heteroaromatic group;

L is an atom or chain -$(CH_2)_p$Het$(CH_2)_q$-;

~~in which~~ p and q, which may be the same or different, ~~is~~ are each zero or the integer 1;

~~and~~ Het is an -O- or -S- atom or a -C(R^{3a})(R^{3b})- ~~(where R^{3a} and R^{3b}, which may be the same or different, is each a hydrogen atom or an -OH or optionally substituted C_{1-6} alkyl~~

~~group)~~, -C(O)-, -C(O)O-, -OC(O)-, -C(S)-, -S(O)-, -$S(O)_2$-, -$N(R^{3c})$O- ~~(where R^{3e} is a hydrogen atom or a straight or branched alkyl group)~~, -$N(R^{3c})$NH-, -$N(R^{3c})C(R^{3a})(R^{3b})$-, -$CON(R^{3c})$-, -$OC(O)N(R^{3c})$-, -$CSN(R^{3c})$-, -$N(R^{3c})CO$-, -$N(R^{3c})C(O)O$-, -$N(R^{3c})CS$-, -$S(O)_2N(R^{3c})$-, -$N(R^{3c})S(O)_2$-, -$N(R^{3c})CON(R^{3d})$- ~~(where R^{3d} is as defined for R^{3e} and may be the same or different)~~, -$N(R^{3c})CSN(R^{3d})$- or -$N(R^{3c})S(O)_2N(R^{3d})$- group and, when one or both of p and q is the integer 1, Het is additionally a -$N(R^{3c})$- group; ~~and~~

R^{3a} and R^{3b} are each independently a hydrogen atom, -OH, or an optionally substituted C_{1-6} alkyl group;

R^{3c} and R^{3d} are each independently a hydrogen atom or a straight or branched alkyl group;

Ar is an optionally substituted aromatic or heteroaromatic group;

or a pharmaceutically acceptable salt, solvate, hydrate, or N-oxide thereof

~~and the salts, solvates, hydrates and *N*-oxides thereof~~.

2. (currently amended) A compound as claimed in claim 1 wherein the dashed line joining A and $C(R^a)$ is present and represents a bond and A is a ~~-$C(R^b)$-~~ -$C(R^b)$= group~~, in which R^a and R^b are as defined in claim 1~~.

3. (original) A compound as claimed in claim 2 wherein R^a and R^b are both hydrogen.

4. (currently amended) A compound as claimed in ~~any one of the previous claims~~ claim 1 wherein X is -S-.

5. (currently amended) A compound as claimed in ~~any one of the previous claims~~ claim 1 wherein Y is -$C(R^{10})$= in which R^{10} is -CN, -$CONH_2$ or -CO_2Alk^6 and Alk^6 is C_{1-4} alkyl.

6. (currently amended) A compound as claimed in ~~any one of the previous claims~~ claim 1 wherein Cy^1 is phenyl or cyclopropyl.

7. (currently amended) A compound as claimed in ~~any one of the previous claims~~ claim 1 wherein Ar represents phenyl, halophenyl, dihalophenyl, (C_{1-6} alkyl)phenyl, pyridinyl or (C_{1-6} alkyl)pyridinyl.

8. (currently amended) A compound as claimed in claim 1 ~~as herein specifically disclosed in any one of the Examples~~ selected from

Ethyl 3-(benzylamino)-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-(*N*-benzyl-*N*-methylamino)-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 6-oxo-7-phenyl-3-[(1-phenylethyl)amino]- 6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-[(2,6-difluorobenzyl)amino]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-benzyl-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 6-oxo-3-phenoxy-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 6-oxo-7-phenyl-3-(phenylthio)-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 6-oxo-7-phenyl-3-[(pyridin-2-ylmethyl)amino]-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

3-(Benzylamino)-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carbonitrile;

6-Oxo-7-phenyl-3-(phenylthio)-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxamide;

Ethyl 3-(benzoylamino)-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 6-oxo-7-phenyl-3-[(phenylsulphonyl)amino]-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-[(anilinocarbonyl)amino]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 6-oxo-7-phenyl-3-(2-phenylethyl)-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-[hydroxy(phenyl)methyl]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-[hydroxy(6-methylpyridin-2-yl)methyl]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-[hydroxy(3-methylphenyl)methyl]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

3-[Hydroxy(phenyl)methyl]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carbonitrile;

3-[Hydroxy(3-methylphenyl)methyl]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carbonitrile;

Ethyl 7-(cyclopropylmethyl)-3-[hydroxy(phenyl)methyl]-6-oxo-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-(anilinosulfonyl)-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

Ethyl 3-[(3-methylphenyl)thio]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate;

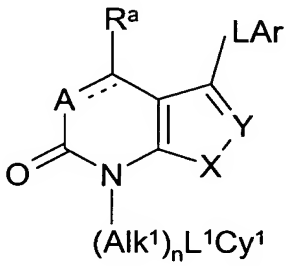
Ethyl 3-[2-(4-methylphenyl)hydrazino]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate; and

Ethyl 3-[(3-chlorophenyl)(hydroxy)methyl]-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-*b*]pyridine-2-carboxylate.

9. (currently amended) A pharmaceutical composition comprising a compound of ~~formula (1) as defined in~~ claim 1, or a pharmaceutically acceptable salt, solvate, hydrate or *N*-oxide thereof, in association with a pharmaceutically acceptable carrier.

10-11. (canceled)

12. (new) A method for inhibiting p38 kinase in a patient suffering from a disease or disorder in which p38 kinase plays a role, comprising administering to the patient a pharmaceutically effective amount of a compound of formula 1:



(1)

wherein

the dashed line joining A and $C(R^a)$ is present and represents a bond and A is a -N= atom or a $-C(R^b)=$ group, or the dashed line is absent and A is a $-N(R^b)-$ or $-C(R^b)(R^c)-$ group;

R^a, R^b and R^c are each independently a hydrogen atom or an optionally substituted C_{1-6} alkyl, -CN, $-CO_2H$, $-CO_2R^1$, $-CONH_2$, $-CONHR^1$ or $-CONR^1R^2$ group;

R^1 and R^2 are each, independently, an optionally substituted alkyl group;

X is an -O-, -S- or substituted nitrogen atom or a $-S(O)-$, $-S(O)_2-$ or -NH- group;

Y is a nitrogen or substituted carbon atom or a -CH= group;

n is zero or the integer 1;

Alk^1 is an optionally substituted aliphatic or heteroaliphatic chain;

L^1 is a covalent bond or a linker atom or group;

Cy^1 is a hydrogen atom or an optionally substituted cycloaliphatic, polycycloaliphatic, heterocycloaliphatic, polyheterocycloaliphatic, aromatic or heteroaromatic group;

L is an atom or chain $-(CH_2)_pHet(CH_2)_q-$;

p and q, which may be the same or different, are each zero or the integer 1;

Het is an -O- or -S- atom or a $-C(R^{3a})(R^{3b})-$, $-C(O)-$, $-C(O)O-$, $-OC(O)-$, $-C(S)-$, $-S(O)-$, $-S(O)_2-$, $-N(R^{3c})O-$, $-N(R^{3c})NH-$, $-N(R^{3c})C(R^{3a})(R^{3b})-$, $-CON(R^{3c})-$, $-OC(O)N(R^{3c})-$, $-CSN(R^{3c})-$, $-N(R^{3c})CO-$, $-N(R^{3c})C(O)O-$, $-N(R^{3c})CS-$, $-S(O)_2N(R^{3c})-$, $-N(R^{3c})S(O)_2-$, $-N(R^{3c})CON(R^{3d})-$, $-N(R^{3c})CSN(R^{3d})-$ or $-N(R^{3c})S(O)_2N(R^{3d})-$ group and, when one or both of p and q is the integer 1, Het is additionally a $-N(R^{3c})-$ group;

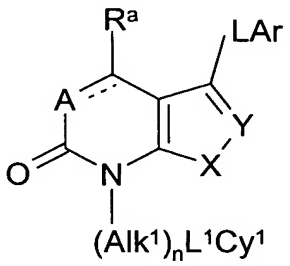
R^{3a} and R^{3b} are each independently a hydrogen atom, -OH, or an optionally substituted C_{1-6} alkyl group;

R^{3c} and R^{3d} are each independently a hydrogen atom or a straight or branched alkyl group;

Ar is an optionally substituted aromatic or heteroaromatic group;

or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or N-oxide thereof.

13. (new) A method for the treatment of autoimmune diseases, inflammatory diseases, destructive bone disorders, proliferative disorders, neurodegenerative disorders, viral diseases, allergies, infectious diseases, heart attacks, angiogenic disorders, reperfusion/ischemia in stroke, vascular hyperplasia, organ hypoxia, cardiac hypertrophy, thrombin-induced platelet aggregation, and conditions associated with prostaglandin endoperoxidase synthetase-2, comprising administering to a patient suffering from such a disease or disorder a pharmaceutically effective amount of a compound of formula 1:



(1)

wherein

the dashed line joining A and $C(R^a)$ is present and represents a bond and A is a -N= atom or a $-C(R^b)=$ group, or the dashed line is absent and A is a $-N(R^b)-$ or $-C(R^b)(R^c)-$ group;

R^a, R^b and R^c are each independently a hydrogen atom or an optionally substituted C_{1-6} alkyl, -CN, $-CO_2H$, $-CO_2R^1$, $-CONH_2$, $-CONHR^1$ or $-CONR^1R^2$ group;

R^1 and R^2 are each, independently, an optionally substituted alkyl group;

X is an -O-, -S- or substituted nitrogen atom or a -S(O)-, $-S(O)_2-$ or -NH- group;

Y is a nitrogen or substituted carbon atom or a -CH= group;

n is zero or the integer 1;

Alk^1 is an optionally substituted aliphatic or heteroaliphatic chain;

L^1 is a covalent bond or a linker atom or group;

Cy^1 is a hydrogen atom or an optionally substituted cycloaliphatic, polycycloaliphatic, heterocycloaliphatic, polyheterocycloaliphatic, aromatic or heteroaromatic group;

L is an atom or chain $-(CH_2)_pHet(CH_2)_q-$;

p and q, which may be the same or different, are each zero or the integer 1;

Het is an -O- or -S- atom or a $-C(R^{3a})(R^{3b})-$, -C(O)-, -C(O)O-, -OC(O)-, -C(S)-, $-S(O)-$, $-S(O)_2-$, $-N(R^{3c})O-$, $-N(R^{3c})NH-$, $-N(R^{3c})C(R^{3a})(R^{3b})-$, $-CON(R^{3c})-$, $-OC(O)N(R^{3c})-$, $-CSN(R^{3c})-$, $-N(R^{3c})CO-$, $-N(R^{3c})C(O)O-$, $-N(R^{3c})CS-$, $-S(O)_2N(R^{3c})-$, $-N(R^{3c})S(O)_2-$, $-N(R^{3c})CON(R^{3d})-$, $-N(R^{3c})CSN(R^{3d})-$ or $-N(R^{3c})S(O)_2N(R^{3d})-$ group and, when one or both of p and q is the integer 1, Het is additionally a $-N(R^{3c})-$ group;

R^{3a} and R^{3b} are each independently a hydrogen atom, -OH, or an optionally substituted C_{1-6} alkyl group;

R^{3c} and R^{3d} are each independently a hydrogen atom or a straight or branched alkyl group;

Ar is an optionally substituted aromatic or heteroaromatic group;

or a pharmaceutically acceptable prodrug, salt, solvate, hydrate, or N-oxide thereof.

14. (new) The method of claim 13 wherein the autoimmune diseases are selected from the group consisting of rheumatoid arthritis, inflammatory bowel disease, ulcerative colitis, Crohn's disease, multiple sclerosis, diabetes, glomerulonephritis, systemic lupus erythematosus, scleroderma, chronic thyroiditis, Grave's disease, hemolytic anemia, autoimmune gastritis, autoimmune neutropenia, thrombocytopenia, chronic active hepatitis, myasthenia gravis, atopic dermatitis, graft vs host disease, and psoriasis.

15. (new) The method of claim 13 wherein the inflammatory diseases are selected from the group consisting of asthma, allergies, respiratory distress syndrome, and acute or chronic pancreatitis.

16. (new) The method of claim 13 wherein the destructive bone disorders are selected from the group consisting of osteoporosis, osteoarthritis, and multiple myeloma-related bone disorder.

17. (new) The method of claim 13 wherein the proliferative disorders are selected from the group consisting of chronic myelogenous leukemia, Kaposi's sarcoma, metastatic melanoma and multiple myeloma.

18. (new) The method of claim 13 wherein the neurodegenerative disorders are selected from the group consisting of Parkinson's disease, Alzheimer's disease, cerebral ischemias and neurodegenerative disease caused by traumatic injury.

19. (new) The method of claim 13 wherein the viral diseases are selected from the group consisting of hepatitis A infection, hepatitis B infection, hepatitis C infection, HIV infection, and CMV retinitis.

20. (new) The method of claim 13 wherein the infections diseases are selected from the group consisting of septic shock, sepsis, and Shigellosis.

21. (new) The method of claim 13 wherein the conditions associated with prostaglandin endoperoxidase synthetase-2 are selected from the group consisting of edema, analgesia, fever, neuromuscular pain, headache, dental pain, arthritis pain, and pain caused by cancer.